



Application for Certification
Part 1

2017 ModelYear

Durability Group: HCRXGPGNNF14
Evaporative Familie(s): HCRXR180RK0

,

Test Group: HCRXT06.45P1

Four Stroke, Otto Cycle, Gasoline Fueled, Ported FI

Ceramic Monolith Pd, Rh Close Coupled Catalyst

6.4 Liter V-8

LDT

Applicable Standards:

50 State - Bin 5 Tier 3 / LEV II

MSAT Compliant

Vehicles Covered:

Jeep Grand Cherokee SRT8 4x4

Vehicle(s) Run:

VID 1 config., Vehicle ID L6WKJ8958 (Exhaust)

VID 2 config., Vehicle ID K1WKJ8647 (EVAP)



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Section 1 Correspondence and Communication

For questions dealing with the Part I application for this Test Group contact:

| <u>Name</u> | <u>Title</u> | <u>Responsibility</u> | <u>Phone</u> | <u>E-mail</u> | <u>Fax</u> |
|-----------------|----------------------------|------------------------|--------------|--|--------------|
| Beth Borland | Certification Engineer | Application Submission | 248.512.3438 | beth.borland@fcagroup.com | 248.576.7928 |
| Steve R. Mazure | Manager Certification Team | Certification Program | 248.576.5471 | steve.mazure@fcagroup.com | 248.576.7928 |

For a complete listing of all Correspondence and Communication Information for FCA US LLC, please see:
"Common Section Book - Section 1 Correspondence and Communication"

Section 2 Durability Group Description

Durability Group Name: HCRXGPGNNF14

For a complete description of the Durability Group Description please see:
"Common Section Book - Section 2. Durability Group Description"

Section 3 Evaporative/Refueling Family Description

Evaporative/Refueling Family Name(s): HCRXR180RK0

For a complete description of the Evaporative/Refueling Family Description please see:
"Common Section Book - Section 3. Evaporative/Refueling Family Description "

For ORVR Agency Review Sign Off please see:
"Common Section Book - Section 16. Agency Approvals"



Section 4 **Durability Procedure Description**

Durability Group: HCRXGPGNNF14

Durability Provision Statement:

Based on FCA US LLC 's good engineering judgement, all the vehicles described in this Application for Certification comply with all applicable intermediate and full useful life standards.

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Aged Components were used

Indicate whether additive or multiplicative DF's were used.

N/A

List all DF's calculated at both full and intermediate useful life

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)

And applicable standards (test results and vehicle description).

Carb - Reference Cert Review Sheet

Evaporative/Refueling Family:

HCRXR180RK0

For a complete description of the Durability Procedure please see:

"Common Section Book - Section 16. Durability Procedure Description "

Indicate if aged components were used.

Yes - Bench Aging

Indicate whether additive or multiplicative DF's were used.

Additive

List all DF's calculated at both full and intermediate useful life

EPA - Reference VERIFY (hard copies of all VERIFY Reports retained in-house)

And applicable standards (test results and vehicle description).

Carb - Reference Cert Review Sheet

Section 5 **Test Group Description**

Test Group Name:

HCRXT06.45P1

Engine displacements covered:

6.4 Liter

Arrangement and number of cylinders:

V-8

Vehicle classes covered:

LDT

Emission standards class:

Bin 5/LEV II and MSAT Compliant

AB71 Qualified Vehicles:

No



Section 8 Emission Testing Waiver Statements

Below is a list clearly identifying the standards applicable to this Test Group for which emission testing was not performed. All FCA US LLC applicable vehicles will conform with the emission standards which emission data is not being provided, as allowed under 40 CFR 86.1829-01 or 86.1810-01.

Particulates, HCHO, N₂O, CST, ASM, NMOG, IM

Section 9 OBD Description

For a complete description of the OBD Description please see: "Common Part 1 Section 16. OBD Description"

For OBD Agency Approvals please see: "Common Part 1 Section 16. Agency Approvals"

OBD Demonstration Compliance Statement: This Test Group meets the full intent of both the Clean Air Act as amended in 1990, section 202(m), and the applicable federal OBD regulations contained in 40 CFR §86.005-17 and 40 CFR §86.1806-01, including a reference to those provisions pertaining to deficiencies in the limited instances where an OBD II system that complies with 1968.2 does not comply with all the requirements of section 1968.1.

Section 10 Description of Alternate - Fueled Vehicles

Not Applicable to this Test Group

FCA US LLC

Test Group - HCRXT06.45P1

| EPA COMP CODE | AA-100 |
|---|--------|
| E10:Powertrain Control Module | |
| E11:Transmission Control Module | |
| E17:ABS Control Module | |
| F03:Plastic Fuel Tank (Partial) | |
| F05:Fuel Pump | |
| F10:Fuel Level Sending Unit | |
| F21:Fuel Tank Rollover Valve | |
| F40:Throttle Body | |
| F50:Fuel Injector | |
| F55:Fuel Pressure Regulator | |
| F64:Fuel Pump Module | |
| F70:Evap. Canister Assembly | |
| F73:ORVR Control Valve | |
| F79:ESIM (Evaporative System Integrity Monitor) | |
| H10:Catalytic Converter | |
| I05:Spark Plug | |
| L01:Heated Oxygen Sensor | |

| EPA COMP CODE | AA-100 |
|---|--------|
| L07:Multiple Displacement System Solenoid | |
| L12:Accelerator Pedal Position Sensor | |
| L15:Camshaft Position Sensor | |
| L16:Crankshaft Position Sensor | |
| L20:Knock Sensor | |
| L25:Vehicle Speed Sensor | |
| M01:Engine Coolant Temp. Sensor | |
| M04:Intake Air Temperature Sensor | |
| M07:Oil Temperature Sensor | |
| M10:Ambient Temperature Sensor | |
| N24:Oil Pressure Sensor | |
| N50:Engine Thermostat | |
| V01:PCV Valve | |
| V05:MAP Sensor | |
| V63:Evap. Can. Purge Solenoid | |
| Z01:VECI Label | |

Section11-100 Engine Parts List

FCA US LLC

Test Group :HCRXT06.45P1

Durability Group: HCRXGPGNNF14 **Standard Fed:** Bin5 **Cal:** LEV II

| Trans. Code | Sales Code | Transfer Case Sales Code/Drive Code | No. of Gears | Over Drive Gear Ratio | Drive Gear Ratio | Engine Sales Code | Torque Code | Torque Size | Conv Clutch Control Type Calib/Special Features |
|----------------|---------------|--|-----------------|--------------------------|-------------------------------------|-------------------------|----------------|----------------|--|
| L8 | DFK | DHB / 4F | 8 | .67 | 4.71,3.14,2.1,1.67,1.29,1.0,.84,.67 | ESG | AC | 270 MM | Electronically shifted data on file |

Section12-200 Transmission

FCA US LLC

HCRXT06.45P1

Durability Group: HCRXGPGNNF14 Standard Fed: Bin5 Cal: LEV II

Asterisk (*) Indicates Manufacturer has elected to certify at this higher test weight class as allowed by CFR 86.1831-01

Engine Code AA-100 Eng Displ: 6.4L (ESG) Evap Family - Evap Code: HCRXR0180RK0-24.6

| Model | Carline Name | Model Qualifier | Opt | Trans. / Tr.Case | Torq. Conv./ Catalyst Identifier | GVW | LVW TWC Drive Curb | ALVW TWC Drive Curb | Axle / OTGR | N/V | Tire | Tire Mfr. | Tire Constr.Cd. | Elec Dyno Q.C. | Elec Dyno RLHP | Dyno Coeff 70A | Dyno Coeff 70 B | Dyno Coeff 70C | Dyno Coeff 20A | Dyno Coeff 20B | Dyno Coeff 20C |
|--------|------------------------------|-----------------|-----|-----------------------|----------------------------------|------|--------------------|---------------------|-------------|------|----------------|-----------|-----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|
| WKJA74 | Jeep: Grand Cherokee SRT 4x4 | SRT | | L8 - AWD DFK / DHB-4F | AC T6.4a | 6500 | 5500 | 6000 | 3.70 | 28.3 | 295/45ZR20 TW7 | TZP | PEX-09 | 17.06 | 19.9 | 66.28000 | -0.1288 | 0.03588 | 72.91000 | -0.1417 | 0.03947 |
| | | | | | | | 2468 | 2901 | 3.70 | 28.3 | 295/45ZR20 TWA | TZP | PFH-01 | 16.29 | 20.9 | 72.70000 | -0.1032 | 0.03560 | 79.97000 | -0.1135 | 0.03916 |
| | | | | | | | 5291 | 5895 | | | | | | | | | | | | | |

FCA US LLC

Test Group: HCRXT06.45P1 - Engine Code Index

Durability Group:
HCRXGPGNNF14

Standard : Bin5 / LEV II

**Vehicle Class: LDT4 (ALVW >5750, LVW 0-3750, GVW 6001-8500) / LDT
(0-8500 GVW)**

Engine Code: AA-100 - 6.4L WK ESG AWD

| Engine Code | RC # | Date | Engine | Carline | Price Class | Trans. Configuration | GVW Min. | GVW Max. | Test Wt. Min. | Test Wt. Max | Drive Code | Sales Areas |
|-------------|----------|------|----------|---------|-------------|---|----------|----------|---------------|--------------|------------|-------------|
| AA-100 | Original | | 6.4L/ESG | WK | SRT | L8/ Automatic L8 - Lockup/Automatic/8-speed | 6500 | 6500 | 5500 | 5500 | AWD | NAS |

Test Group: HCRXT06.45P1 - No Engine Code Changes

Durability Group: HCRXGPGNNF14 Standard Fed: Bin5 Cal: LEV II

| RC # | Submission Date | Description |
|------|-----------------|-------------|
|------|-----------------|-------------|

No Results Found

Section12-500 Engine Code Index

Vehicle Parameters

Valves per cylinder Engine
6.4L - 2

Test Parameters

SIL usage: See shift schedule table

Cooling fan configuration: Models
All - One fan center front

Addition Cooling: Models
All - None

Evaporative Testing Parameters: Model
All - 187 grams

Fuel temperature Profile: Models
All – eWK_25

Special Test Procedure: Models
All - none



July 7, 2016

Mr. Joel Dalton
Certification and Compliance Division
U.S. Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, Michigan 48105

Dear Mr. Dalton:

Re: 2017 Model Year LDT Executive Order Request (#A-009-1328)

FCA US LLC requests a 2017 MY Certificate of Conformity for the 6.4L Tier 2 Bin 5 Federal and 50-State test group HCRXT06.45P1 with evaporative family HCRXR180RK0. This test group is being certified to 50-State LDT standards. FCA US LLC agrees to meet the Tier 2, Bin 5 standards, and the regulations applicable to such vehicles during the full useful lives of the vehicles in test group HCRXT06.45P1. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. FCA US LLC also elects to follow GHG path 86.1818(f) (1). The FTP emission standards for this LDT test group are as follows:

| <u>Emission Standards</u> | | <u>NMOG</u> | <u>NOx</u> | <u>CO</u> | <u>HCHO</u> |
|------------------------------|------|--------------|--------------|------------|-------------|
| Federal Bin 5 | 50K | 0.075 | 0.05 | 3.4 | 0.015 |
| | 120K | 0.090 | 0.07 | 4.2 | 0.018 |
| <u>Evaporative Standards</u> | | <u>3-Day</u> | <u>2-Day</u> | <u>R/L</u> | <u>ORVR</u> |
| HCRXR180RK0 | 120K | 0.90 | 1.15 | 0.05 | 0.20 |

Initial combined Gasoline CREE for HCRXT06.45P1 test group is = 468.4

The California Executive Order is A-009-1328 and models are as follows:

Division/Model
Jeep Grand Cherokee SRT8 4x4

If there are any questions regarding this submission, please contact Beth Borland at (248) 512-3438 or Steve Mazure

Sincerely,
FCA US LLC

Steve Mazure, Manager
Vehicle Certification
sm/bab



July 7, 2016

Ms. Annette Hebert, Chief
ECARS Division
Air Resources Board
9480 Telstar Avenue, Suite 4
El Monte, California 91731

Dear Ms. Hebert:

Re: 2017 Model Year LDT Executive Order Request (#A-009-1328)

FCA US LLC requests a 2017 MY Executive Order for the 6.4L 50-State test group HCRXT06.45P1 with evaporative family HCRXR180RK0. This test group is being certified to California LEV II LDT standards. FCA US LLC agrees that the exhaust and evaporative emission standards listed below and in the application for certification apply to both certification and in-use vehicles according to the provisions of 40 CFR, Parts 86 and 88, as applicable. FCA US LLC also elects to follow GHG path 86.1818(f) (1). The FTP emission standards for this LDT test group are as follows:

| <u>Emission Standards</u> | | <u>NMOG</u> | <u>NOx</u> | <u>CO</u> | <u>HCHO</u> | <u>Hwy NOx</u> |
|------------------------------|------|--------------|--------------|------------|--------------|----------------|
| California LEV II | 50K | 0.075 | 0.05 | 3.4 | 0.015 | 0.070 |
| | 150K | 0.090 | 0.07 | 4.2 | 0.018 | 0.090 |
| <u>Evaporative Standards</u> | | <u>3-Day</u> | <u>2-Day</u> | <u>R/L</u> | <u>ORVR*</u> | |
| HCRXR180RK0 | 150K | 0.90 | 1.15 | 0.05 | 0.20 | |

* ORVR useful life is 120K.

Initial combined Gasoline CREE for HCRXT06.45P1 test group is = 468.4

FCA US LLC attests that the test and production vehicles do not have defeat devices; that all AECDs have been declared and described in the Application; and that test and production vehicles do not have alternate maps.

If there are any questions regarding this submission, please contact Beth Borland at (248) 512-3438 or Steve Mazure at (248) 576-5471.

Sincerely,
FCA US LLC

Steve Mazure, Manager
Vehicle Certification

c: L. Benedict
srm/bab

USEPA Fee Form

General Information

| | |
|--------------------|---|
| Date: | <input type="text" value="01/27/2016"/> |
| Process Code: | <input type="text" value="Submit New Filing Fee Form"/> |
| Manufacturer Code: | <input type="text" value="CRX"/> |
| Manufacturer Name: | <input type="text" value="FCA USLLC"/> |

Manufacturer Contact

| | |
|--|---|
| Name: | <input type="text" value="Kelli Myers"/> |
| Email Address: | <input type="text" value="kelli.myers@fcagroup.com"/> |
| Phone: | <input type="text" value="248-576-5457"/> |
| Calendar Year complete application submitted to EPA: | <input type="text" value="2016"/> |
| Engine Family / Evaporative Family / Test Group: | <input type="text" value="HCRXT06.45P1"/> |

Certificate Request Type (Industry Sector Code)

- | | |
|--|---|
| <input checked="" type="radio"/> On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (Federal) (A, B, D, J, T, V) | <input type="radio"/> Nonroad CI (L) |
| <input type="radio"/> On-Highway HDE Dyno Cert (Federal) (E, H) | <input type="radio"/> Nonroad SI (B, S) |
| <input type="radio"/> On-Highway LD ICI, MDPV ICI, HDV ICI (A, B, D, J, T, V) | <input type="radio"/> Locomotive (G, K) |
| <input type="radio"/> On-Highway Motorcycle (C) | <input type="radio"/> All Nonroad Recreational, excluding Marine engines (X, Y) |
| <input type="radio"/> On-Highway HDV Evap (F) | <input type="radio"/> All Marine (Including IMO) (M, N, W) |
| <input type="radio"/> On-Highway LDV, LTD, MDVPV, HDV Chassis Cert (California-Only) (A, B, D, J, T, V) | <input type="radio"/> Component Certification for Evaporative Emissions (P) |
| <input type="radio"/> On-Highway HDE Dyno Cert (California-Only) (E, H) | |

IMO Name (Required for dual US/IMO Marine Only):

ICI VIN Number (Required for ICIs Only):

Do you qualify for a Reduced Fee (RF)?

What is the total number of vehicles, engines, or units covered?:

What is the aggregate total retail value of the vehicles, engines or units covered?:

Payment Information

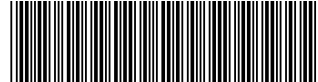
| | |
|---------------|---|
| Amount Owed: | <input type="text" value="22,889.00"/> |
| Payment Type: | <input type="text" value="Offline Wire"/> |

Comments:



2017 50-STATE (NAS) 6.4L (ESG) WK

Test Group: HCRXT06.45P1

| FCA US LLC | | VEHICLE EMISSION CONTROL INFORMATION |
|--|--|---|
| GROUP: HCRXT06.45P1 NO ADJUSTMENTS NEEDED HO2S / SFI / TWC | | EVAP: HCRXR0180RK0 CONFORMS TO REGULATIONS: 2017 MY ENGINE: 6.4L |
| U.S. EPA: T2 B5 LDT OBD: CA OBD II FUEL: GASOLINE | | 47480 871AA |
| CA: LEV II LDT OBD: CA OBD II FUEL: GASOLINE | |  |

HCRXT06.45P1 Part 1 Section 15-100 (2017)